



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	Construction Dry Sand
<b>MSDS REVISION DATE:</b>	August, 2000
<b>CHEMICAL NAME:</b>	SiO <sub>2</sub>
<b>FORMULA:</b>	Mixture
<b>MANUFACTURER/SUPPLIER</b>	
Ross Island Sand & Gravel Co. 4315 SE McLoughlin Blvd. Portland, Oregon 97202	Mailing Address: PO Box 82249 Portland, Oregon 97282
<b>Emergency/Non-Emergency Number:</b>	(503) 239-5504 Monday-Friday 8-5 PST

## 2. COMPOSITION/INFORMATION INGREDIENTS

INGREDIENT NAME	CAS #	EXPOSURE LIMITS		CONC. %
		OSHA (mg/m <sup>3</sup> )	ACGIH (mg/m <sup>3</sup> )	
Silicon Dioxide. SiO <sub>2</sub> (amorphous)	68855-54-9	3.8 total dust based on maximum free silica	10 total dust	0-91
Particulate, Not Otherwise Classified	N/A	15 total dust 5 respirable	10 inhalable dust 3 respirable dust	0-90
Silicon Dioxide, SiO <sub>2</sub> (free silica)	14808-60-7	2.7 total dust 0.91 respirable dust based on maximum free silica	0.1 respirable dust	0-9

## 3. HAZARDS IDENTIFICATION

<b>***** EMERGENCY OVERVIEW *****</b>	
White or tan sand. Free crystalline silica may cause cancer.	
<b>ROUTES OF ENTRY:</b>	Inhalation
<b>HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:</b>	
<b>ACUTE INHALATION:</b>	Dust may mechanically irritate respiratory system and cause coughing.
<b>ACUTE SKIN CONTACT:</b>	Dust may cause mechanical irritation.
<b>ACUTE EYE CONTACT:</b>	Dust may cause mechanical irritation.
<b>ACUTE INGESTION:</b>	None expected.
<b>CHRONIC INHALATION:</b>	Dust may cause silicosis, shortness of breath caused by lung scarring, pain in chest and coughing. Prolonged exposure to silica in the form of quartz or cristobalite is associated with increased risk of lung cancer.
<b>CARCINOGENICITY:</b>	
<b>ACGIH:</b>	Free crystalline silica is listed as a suspected human carcinogen in the Notice of Intended Changes.
<b>NTP:</b>	Respirable silica may reasonably be anticipated to be carcinogenic.
<b>IARC:</b>	Crystalline silica in the form of quartz or cristobalite has been classified as carcinogenic.
<b>OSHA:</b>	No

**3. HAZARDS IDENTIFICATION *cont'd.***

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Persons with impaired respiratory function will be more susceptible to the effects of the dust.

**4. FIRST AID MEASURES**

**INHALATION:** Remove victim to fresh air, if not breathing, give artificial respiration. If any symptoms or irritation persist, contact a physician.

**SKIN:** Wash with normal soap and water.

**EYE:** Flush with large amounts of water for 15 minutes. If any symptoms or irritation persist, contact a physician.

**INGESTION:** Do not induce vomiting, give large quantities of water or milk. If any symptoms or irritation persist, contact a physician.

**5. FIRE FIGHTING MEASURES**

<b>FLASH POINT:</b>	Not Combustible
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<b>AUTO IGNITION TEMPERATURE:</b>	Not Applicable
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<b>LOWER FLAMMABLE LIMIT:</b>	Not Applicable
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<b>UPPER FLAMMABLE LIMIT:</b>	Not Applicable
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**HAZARDOUS COMBUSTION PRODUCTS:** None, not combustible

**FIRE AND EXPLOSION HAZARD:** Not sensitive to explosion. Will not support combustion.

**EXTINGUISHING MEDIA:** Not combustible. Use media appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Does not burn. SCBA required for standard firefighting.

**6. ACCIDENTAL RELEASE MEASURES:**

**SPILL OR LEAK PROCEDURES:** Stop source of spill. Scoop up spilled powder avoiding dust conditions. Wet sweeping may be used to avoid dusting. Wear appropriate Personal Protective Equipment.

**7. HANDLING AND STORAGE:**

**HANDLING AND STORAGE PRECAUTIONS:** Protect against physical damage. Mechanical filter dust masks may be required if excessive dust occurs during handling.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

**EYE PROTECTION:** Safety glasses with sideshields or mechanical goggles for dust.

**SKIN PROTECTION:** None required other than that for personal hygiene. To reduce exposure, work clothing should be left at the workplace.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION: *cont'd.***

**RESPIRATORY PROTECTION:** Use NIOSH approved respirators with High Efficiency Particulate Air (HEPA) or P100 filters when exposure limits are or may be exceeded. Higher dust levels may require a powered air purifying respirator with a HEPA or P100 filter or a positive pressure supplied air respirator.

**ENGINEERING CONTROLS:** Minimize or control dust generating activities. If excessive dust levels are generated at transfer points, local exhaust ventilation may be needed.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>PHYSICAL STATE/APPEARANCE:</b>	Solid, white or tan sand		
<b>BOILING POINT:</b>	None	<b>ODOR:</b>	None
<b>MELTING/FREEZING POINT:</b>	>1,093°C (>2,000°F)		
<b>SOLUBILITY IN WATER:</b>	Insoluble	<b>pH:</b>	6-8
<b>SPECIFIC GRAVITY:</b>	2.5 – 3.0		
<b>% VOLATILE BY WEIGHT:</b>	Not Applicable		
<b>VAPOR PRESSURE:</b>	Not Applicable		
<b>VAPOR DENSITY:</b>	Not Applicable		

**10. REACTIVITY/STABILITY:**

<b>STABILITY:</b>	Stable
<b>CONDITIONS OF REACTIVITY:</b>	Not Applicable
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur
<b>INCOMPATIBILITIES:</b>	Not Applicable
<b>DECOMPOSITION PRODUCTS:</b>	None

**11. TOXICOLOGICAL INFORMATION:**

<b>LD<sub>50</sub>:</b>	Not determined
<b>LC<sub>50</sub>:</b>	Not determined
<b>SENSITIZATION TO PRODUCT:</b>	None
<b>CARCINOGENICITY:</b>	Contains free crystalline silica, a human carcinogen.
<b>IRRITANCY OF PRODUCT:</b>	None, other than mechanical
<b>REPRODUCTIVE TOXICITY:</b>	No information available
<b>TERATOGENICITY:</b>	No information available
<b>MUTAGENICITY:</b>	No information available
<b>CHRONIC EXPOSURE:</b>	See Section 3
<b>NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS:</b>	Known lung carcinogens

**12. ECOLOGICAL INFORMATION:**

None available

**13. DISPOSAL CONSIDERATIONS:****WASTE DISPOSAL METHOD:** Follow federal, state, and local regulations.**14. TRANSPORTATION INFORMATION:** Not regulated**15. REGULATORY INFORMATION:****OSHA:** Hazard Communication standard applies to this product for constituents listed in Section 2.**TSCA:** None**CERCLA REPORTABLE QUANTITY:** None**SARA TITLE III:****Section 302 Extremely Hazardous Substance:** None**Section 311/312 Hazard Categories:** None**Section 313 Toxic Chemicals:** None**RCRA:** None**STATE REGULATORY INFORMATION:** The following chemicals are specifically listed by individual states; other product specific health and safety data in other section of the MSDS may also be applicable for state requirements. For details on specific regulatory requirements, contact the appropriate state agency.

COMPONENT NAME	CAS #	CONC. %	STATE CODE
Crystalline Silica	14808-60-7	0-9	CA Proposition 65

**16. OTHER INFORMATION:****MSDS STATUS:** Replaces MSDS dated 9/18/92**REVISION NUMBER:** Version 2.0**PREPARED BY:** Paul Carlson Associates, Inc.  
Milwaukie, Oregon  
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